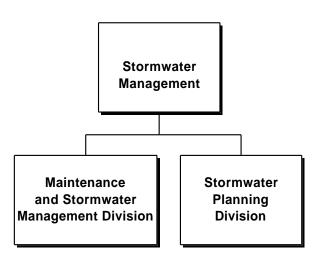
# DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES STORMWATER MANAGEMENT



## Agency Position Summary

123 Regular Positions (-2) / 123.0 Regular Staff Years (-2.0)

#### Position Detail Information

#### MAINTENANCE AND STORMWATER MANAGEMENT DIVISION

#### **ADMINISTRATION**

- 1 Director
- 2 Engineers IV
- 1 Safety Analyst
- 1 Management Analyst II
- Network/Telecom Analyst I
- Administrative Assistant IV
- 4 Administrative Assistants II
- 11 Positions
- 11.0 Staff Years

#### **CONTRACTING SERVICES**

- 1 Engineer I
- <u>1</u> Engineering Technician II
- 2 Positions
- 2.0 Staff Years

#### MAINTENANCE AND SERVICES

#### Field Operations

- 1 Engineer II
- 4 Senior Maintenance Supervisors
- 1 GIS Analyst I
- 9 Labor Crew Chiefs
- 6 Laborers III (-2)
- 9 Utility Workers
- 8 Heavy Equipment Operators
- 7 Motor Equipment Operators
- 12 Truck Drivers
- 4 Masons I
- 61 Positions (-2)
- 61.0 Staff Years (-2)

#### Maintenance Inspections

- 1 Engineer II
- 1 Engineering Technician III
- 1 Senior Maintenance Supervisor
- 3 Engineering Technicians I
- 6 Positions
- 6.0 Staff Years
- ( ) Denotes Abolished Position

#### Engineering/Technical Support

- 1 Engineer III
- 3 Engineers II
- 2 Engineering Technicians III
- 1 Engineering Technician II
- 7 Positions
- 7.0 Staff Years

#### **Equipment/Specialty Trades**

- 1 Vehicle Maintenance Coordinator
- 1 Heavy Equipment Operator
- 1 Motor Equipment Operator
- Carpenter I
- 1 Equipment Repairer
- <u>1</u> Welder II
- 6 Positions
- 6.0 Staff Years

#### SIGN SERVICES AND MATERIAL SUPPORT

- 1 Sign Shop Supervisor
- 1 Warehouse Supervisor
- 1 Warehouse Specialist
- 2 Engineering Aides
- <u>2</u> Motor Equipment Operators7 Positions
- 7.0 Staff Years

#### **STORMWATER PLANNING DIVISION**

#### STORMWATER PLANNING

- 1 Director
- 1 Engineer IV
- 3 Engineers III
- 3 Engineers II
- Engineering Technician III
- Engineering Technician I
- 1 Environmental Technologist III
- 1 Environmental Technologist II
- 1 Administrative Assistant II
- 13 Positions
- 13.0 Staff Years

#### **STORM DRAINAGE DESIGN**

- 1 Engineer IV
- 1 Engineer III
- 8 Engineers II
- 10 Positions
- 10.0 Staff Years

## **Agency Mission**

To develop and maintain a comprehensive watershed and infrastructure management program to protect property, health, and safety, to enhance the quality of life, and to preserve and improve the environment for the benefit of the public. To plan, design, construct, operate, maintain and inspect the infrastructure and perform environmental assessments through coordinated stormwater and maintenance programs in compliance with all government regulations utilizing innovative techniques, customer feedback and program review. To be responsive and sensitive to the needs of the residents, customers and public partners.

Agency Summary							
		FY 2002	FY 2002	FY 2003	FY 2003		
	FY 2001	Adopted	Revised	Advertised	Adopted		
Category	Actual	Budget Plan	Budget Plan	Budget Plan	Budget Plan		
Authorized Positions/Staff Years							
Regular	122/ 122	122/ 122	125/ 125	125/ 125	123/ 123		
Expenditures:							
Personnel Services	\$4,837,309	\$5,614,492	\$5,511,474	\$6,075,704	\$6,007,822		
Operating Expenses	2,180,002	2,744,331	2,752,409	2,899,697	2,749,669		
Capital Equipment	424,773	337,040	570,460	241,397	241,397		
Subtotal	\$7,442,084	\$8,695,863	\$8,834,343	\$9,216,798	\$8,998,888		
Less:							
Recovered Costs	(\$765,300)	(\$629,952)	(\$664,952)	(\$658,595)	(\$708,595)		
Total Expenditures	\$6,676,784	\$8,065,911	\$8,169,391	\$8,558,203	\$8,290,293		
Income:							
Street Sign Fabrication Fees	\$3,068	\$5,170	\$5,170	\$5,170	\$5,170		
Miscellaneous Revenue	3,844	14,027	14,027	14,027	14,027		
Total Income	\$6,912	\$19,197	\$19,197	\$19,197	\$19,197		
Net Cost to the County	\$6,669,872	\$8,046,714	\$8,150,194	\$8,539,006	\$8,271,096		

Cost Center Summary							
Category	FY 2001 Actual	FY 2002 Adopted Budget Plan	FY 2002 Revised Budget Plan	FY 2003 Advertised Budget Plan	FY 2003 Adopted Budget Plan		
Maintenance and Stormwater							
Management Division	\$6,184,541	\$7,132,948	\$7,153,122	\$7,482,045	\$7,214,135		
Stormwater Planning Division	492,243	932,963	1,016,269	1,076,158	1,076,158		
Total Expenditures	\$6,676,784	\$8,065,911	\$8,169,391	\$8,558,203	\$8,290,293		

## **Board of Supervisors' Adjustments**

The following funding adjustments reflect all changes to the <u>FY 2003 Advertised Budget Plan</u>, as approved by the Board of Supervisors on April 29, 2002:

A net decrease of \$267,910 and 2/2.0 SYE positions as part of the \$28.8 million Reductions to County Agencies and Funds approved by the Board of Supervisors to allow for a two-cent real estate tax rate reduction and to provide additional funding for the Fairfax County Public School system. These reductions include the elimination of 2/2.0 SYE Laborer III positions, resulting in a savings of \$67,882, the deferral of parking lot repairs and decreased contractual stormwater management services and repairs resulting in a savings of \$150,028 in operating expenses, and an increase of \$50,000 in Recovered Costs from increased efforts on County capital construction projects.

The following funding adjustments reflect all approved changes to the FY 2002 Revised Budget Plan from January 1, 2002 through April 22, 2002. Included are all adjustments made as part of the FY 2002 Third Quarter Review:

A net decrease of \$472,916 as part of the \$24.2 million Reductions to County Agencies and Funds approved by the Board of Supervisors to address the FY 2002 revenue shortfall and increased public safety requirements. These reductions include \$194,620 from the management of position vacancies, \$243,296 in operating expenses primarily by deferring the repair or replacement of various stormwater channels, ponds, or other facilities, and \$35,000 from increased Recovered Costs for County construction projects.

## County Executive Proposed FY 2003 Advertised Budget Plan

## **Purpose**

The Stormwater Management business area consists of the Maintenance and Stormwater Management Division and the Stormwater Planning Division. These two agencies develop, promote, and implement strategies that protect the County's stormwater infrastructure and preserve and improve the natural ecosystem. This business area was established in conjunction with a Department of Public Works and Environmental Services reorganization in FY 2000 in order to place new emphasis on environmental stewardship within the stormwater management areas. This reorganization consolidated key functions such as development and implementation of master plan efforts, inventory identification and assessment, stormwater regulation, capital construction, and performance of critical maintenance activities.

The Maintenance and Stormwater Management Division provides for in-house and contracted maintenance services for the County's vast inventory of stormwater facilities, walkways, roadways, commercial revitalization, park and ride and commuter rail facilities, public street name signs, and other related infrastructure. Additionally, this division provides snow removal and other emergency support services for designated facilities and agencies countywide.

The Stormwater Planning Division provides stormwater planning, monitoring, and capital project design services. This division maintains the County's federally mandated stormwater discharge permit (National Pollutant Discharge Elimination System [NPDES] permit. This division also coordinates state mandated dam operation and maintenance certificates, watershed management efforts, public education and awareness initiatives, stream monitoring and assessments, and implementation of the County's master drainage plan. Engineering design and contract administration services for storm drainage improvement projects are also provided.

## **Key Accomplishments**

- ♦ Completed the Stream Protection Strategy Study. This study provides a complete baseline assessment of benthic, fish, and stream habitat in Fairfax County. It has been determined that over 70 percent of the County streams are of very poor to only fair biological quality.
- Completed a two year implementation program to establish new business practices to reduce response time to citizen requests for maintenance services. Initial response to citizen requests within one business day of receipt has increased from 67 percent to 95 percent. Final complaint close-out within five business days has increased from 81 percent to 95 percent.
- ♦ Enhanced public outreach efforts to increase pollutant and debris removal via partnerships with Northern Virginia Soil and Water Conservation District, Virginia Department of Forestry, Virginia Lakes Association, Engineers and Surveyors Institute, Council of Governments, and participation with numerous steering committees, homeowners/civic associations, and public exhibitions.

 Established a program to increase pollutant and debris removal efficiencies of substandard stormwater management facilities through rehabilitation and retrofit. Currently, 16 stormwater management facilities are under design/reconstruction.

#### FY 2003 Initiatives

- Initiate a biological monitoring program to evaluate effectiveness of stormwater management/best management practice facilities on stream biological quality.
- Use available water quality monitoring data to develop an improved model for estimating pollutant loadings to the County's receiving water system.
- ♦ Enhance illicit discharges identification by using new screening tools (optical brighteners and electrical conductivity) at larger outfalls with baseflows.
- Initiate a program to evaluate the retrofit of stormwater management facilities serving approximately 1,100 acres per year and retrofit all ponds in the study area deemed practical.

## **Performance Measurement Results**

During FY 2001, 200 miles of storm drainage system (25 percent), 980 stormwater management facilities (100 percent), 211 miles of walkway (40 percent) and 27,468 public street signs (79.6 percent) were inspected. All objectives pertaining to these inspections were met or exceeded. Through the inspections, the agency was able to identify in advance maintenance areas that met rehabilitation or replacement criteria.

Citizen maintenance requests per 100 miles of storm drainage and walkway systems again have been reduced in FY 2001 by 23 percent and 40 percent respectively. Citizen maintenance requests per 100 stormwater management facilities has increased 10 percent.

# **Funding Adjustments**

The following funding adjustments from the FY 2002 Revised Budget Plan are necessary to support the FY 2003 program:

- ♦ An increase of \$369,610 in Personnel Services associated with salary adjustments necessary to support the County's compensation program.
- ◆ A net decrease of \$15,374 in Operating Expenses primarily due to a one-time increase in FY 2002 for costs associated with the FY 2001 Carryover Review. In addition, a decrease of \$489 in Operating Expenses for Information Technology infrastructure charges based on the agency's historic usage and the Computer Equipment Replacement Fund (CERF) surcharge to provide for the timely replacement of the County's information technology infrastructure.
- ♦ A decrease of \$80,145 in Operating Expenses for Department of Vehicle Services charges based on anticipated charges for fuel, the County motor pool, vehicle replacement, and maintenance costs.
- An increase of \$28,643 in Recovered Costs primarily reflecting actual services provided to other agencies.
- Funding of \$241,397 is recommended for Capital Equipment for replacement equipment that is worn and beyond its useful life. This equipment includes a track loader for the loading of heavy material and the grading of soil, a backhoe for maintenance and construction requirements such as the installation of underground pipes, and a chemical spreader and snow plow push beam for snow removal efforts.

The following funding adjustments reflect all approved changes to the FY 2002 Revised Budget Plan since passage of the <u>FY 2002 Adopted Budget Plan</u>. Included are all adjustments made as part of the FY 2001 Carryover Review and all other approved changes through December 31, 2001:

- ♦ Encumbered carryover of \$289,206 including \$92,286 in Operating Expenses and \$196,920 in Capital Equipment.
- Unencumbered carryover of \$89,088 including \$69,088 in Operating Expenses and \$20,000 in Capital Equipment due to unexpended Close Management Initiatives (CMI) savings.
- An increase of \$73,102 including \$71,602 in Personnel Services and \$1,500 in Operating Expenses to support the transfer of 1/1.0 SYE Engineer IV position from Land Development Services to Stormwater Management.
- ♦ An increase of \$125,000 including \$100,000 in Personnel Services and \$25,000 in Operating Expenses for 2/2.0 SYE additional positions to support efforts to begin the remapping of perennial streams in Fairfax County as requested by the Board of Supervisors.



# Maintenance and Stormwater Management Division

#### Goal

To maintain the County's storm drainage systems, stormwater management facilities, walkways/trails, commuter rail and park-and-ride facilities, and public street name signs, in addition to providing snow removal for essential County facilities, responding to health and safety directives, and providing support for other public safety emergencies as requested.

Cost Center Summary							
	EV 0004	FY 2002	FY 2002	FY 2003	FY 2003		
Category	FY 2001 Actual	Adopted Budget Plan	Revised Budget Plan	Advertised Budget Plan	Adopted Budget Plan		
Authorized Positions/Staff Years	71010101						
Regular	101/ 101	101/ 101	101/ 101	102/ 102	100/ 100		
Total Expenditure	\$6,184,541	\$7,132,948	\$7,153,122	\$7,482,045	\$7,214,135		



# **Stormwater Planning Division**

#### Goal

To develop and implement the planning and design of stormwater systems to promote, preserve, and improve the natural ecosystems in order to enhance the quality of life within the community.

Cost Center Summary							
Category	FY 2001 Actual	FY 2002 Adopted Budget Plan	FY 2002 Revised Budget Plan	FY 2003 Advertised Budget Plan	FY 2003 Adopted Budget Plan		
Authorized Positions/Staff Years							
Regular	21/ 21	21/ 21	24/ 24	23/ 23	23/ 23		
Total Expenditure	\$492,243	\$932,963	\$1,016,269	\$1,076,158	\$1,076,158		

## **Objectives**

- ◆ To inspect at least 22 percent of the County's storm drainage system and 100 percent of the stormwater management facilities in order to mitigate flooding and protect property by identifying and correcting deficiencies otherwise reported by citizens, while maintaining the number of maintenance requests at 70 per 100 miles of storm drainage system and a reduction from 11 to 9 per 100 stormwater management facilities.
- To inspect and maintain at least 40 percent of the County's walkways and trails in order to ensure safe usage by the general public by identifying and correcting deficiencies otherwise reported by citizens.
- ♦ To inspect approximately 75 percent of all public street name signs and either repair or replace damaged or missing signs within 3 days of identification or citizen notification.
- ◆ To increase the completion of improvement designs on schedule and within budget by 10 percentage points, from 70 percent to 75 percent, toward a future target of 80 percent.
- ◆ To inspect and sample at least 120 stormwater outfalls annually in order to prepare an annual report that has no major comments and is required for the Municipal Separate Storm Sewer System Permit (MS4) issued by Virginia Department of Environmental Quality (DEQ).
- ♦ To review and process at least 75 percent of waiver requests and rezoning applications within established deadlines in order to implement the Stormwater Control Plan.

#### **Performance Indicators**

	Prior Year Actuals			Current Estimate	Future Estimate
Indicator	FY 1999 Actual	FY 2000 Actual	FY 2001 Estimate/Actual	FY 2002	FY 2003
Output:					
Inventory:					
Storm drainage system (miles) <sup>1</sup>	2,200	756	2,206 / 805	850	895
Stormwater management facilities <sup>2</sup>	2,713	941	2,833 / 980	980	1,015
Walkways/trails (miles)	375	408	405 / 528	538	573
Public street name signs	33,936	34,186	34,736 / 34,514	34,686	35,170
Inspections:					
Storm drainage system (miles) <sup>1</sup>	650	87	167 / 200	170	225
Stormwater management facilities <sup>2</sup>	1,260	941	960 / 1,365	979	1,015
Walkways/trails (miles)	128	416	189 / 211	215	229
Public street name signs	29,088	34,186	25,827 / 27,468	26,015	26,637
Improvement designs completed	17	12	15 / 15	18	18
SWM outfalls inspected and sampled	121	141	120 / 105	120	120
Waiver requests and rezoning applications processed	470	288	380 / 280	280	280
Efficiency:					
Maintenance cost per:					
Storm drainage system (miles)	\$558	\$1,993	\$1,917 / \$1,893	\$1,608	\$2,026

	Prior Year Actuals			Current	Future
Indicator	FY 1999 Actual	FY 2000 Actual	FY 2001 Estimate/Actual	Estimate FY 2002	Estimate FY 2003
Stormwater management facilities <sup>3</sup>	\$1,168	\$994	\$1,026 / \$644	\$903	\$964
Walkways/trails (miles)	\$547	\$766	\$678 / \$657	\$632	\$639
Public street name signs	\$10	\$12	\$11 / \$12	\$13	\$13
Design cost as a percent of TPE	NA	11%	10% / 10%	10%	10%
Cost per SWM outfall inspected and sampled	\$153	\$126	\$154 / \$170	\$163	\$160
Cost per waiver request and rezoning application processed	\$388	\$393	\$389 / \$411	\$411	\$432
Service Quality:					
Percent inspected:					
Storm drainage system (100 miles)	29.6%	11.5%	7.6% / 25.0%	20.0%	22.0%
Stormwater management (100 facilities)	46.4%	100.0%	33.9% / 100.0%	100.0%	100.0%
Walkways/trails (100 miles)	34.1%	100.0%	46.7% / 40.0%	40.0%	40.0%
Percent of street signs inspected	85.7%	100.0%	74.4% / 79.6%	75.0%	75.7%
Percent of improvement designs completed on time and within budget	62%	50%	60% / 50%	70%	75%
Percent of SWM outfalls inspected and sampled requiring correction or resolution	NA	NA	10% / 10%	10%	10%
Outcome:					
Citizen maintenance requests per:					
Storm drainage (100 miles)	24	75	73 / 58	75	70
Stormwater management (100 facilities	9	10	9/11	11	9
Walkways/trails (100 miles)	11	10	8/6	6	7
Average response time to repair signs (days)	5.6	3.9	3.9 / 2.0	3.0	3.0
Percentage point change in improvement designs completed on time and within budget	24	(8)	10 / 15	10	15
Maintain zero DEQ major comments regarding the MS4 Annual Report	Yes	Yes	Yes / Yes	Yes	Yes
Percent of rezoning applications and waiver requests processed within established deadlines	NA	NA	75% / 75%	75%	75%

<sup>&</sup>lt;sup>1</sup> Beginning in FY 2000, mileage is based on actual surveys and land records, and inspections are performed by staff only. Prior years' inspections included citizen inspections as submitted through maintenance requests. The FY 2001 estimate is based on the prior methodology.

<sup>&</sup>lt;sup>2</sup> FY 2000 actual inventory and inspections reflect only County-maintained facilities. Prior years' amounts included private facilities. The FY 2001 estimate is based on the prior methodology.

<sup>&</sup>lt;sup>3</sup> On-going maintenance requirements were redefined in FY 2001, resulting in decreased costs. In FY 2002, new State mandates impacted costs, resulting in higher costs per facility.